

## CLAIMS

SUB A6&gt;

1. Parts (17a, 17b) to be connected with one another by means of a screw connection (17), of which one has a threaded bore (18) and the other has a threaded pin (19), the threaded bore (18) having, on a part (L2) of its length (L1) running out towards the entry, a transversely offset hole widening (20) into which the threaded pin (19) can be axially inserted, the threaded pin (19) being transversely moveable between this transversely offset insertion position and a position which is coaxial with regard to the threaded bore (18) and engaging into the remaining thread grooves of the threaded bore (18), the parts (17a, 17b) being screwable against a stop (22) effective between them, characterised in that, the threaded pin (19) has a full thread.
2. Parts to be connected with one another by means of a screw connection according to claim 1, characterised in that, the hole widening (22) is laterally covered over by a wall section (25a) of the one part (17a).
3. Parts (17a, 17b) to be connected with one another by means of a screw connection (17), of which one has a threaded bore (18) and the other has a threaded pin (19), the threaded pin (19) having on a part (L6) of its length (L4) running out at its free end a lateral tapering (33), and the parts (17a, 17b) being screwable against a stop (22) effective between them, characterised in that, the tapering (33) is so dimensioned radially and in the circumferential direction that the threaded pin

SUB A6&gt;

- 5 (19) can be inserted over the part (L6) of its length (L4) into the core hole (D3) of the threaded bore (18), and is then moveable with its remaining thread grooves transversely into the thread grooves of the threaded bore (18).
4. Parts (17a, 17b) to be connected with one another by means of a screw connection, characterised in that,  
10 the threaded pin (19) has a full thread in its, with reference to the tapering (33), remaining region.
5. Parts to be connected with one another by means of a screw connection according to any preceding claim, characterised in that,  
15 the stop (22) is formed by means of the end of the one part (17a) having the threaded bore (18) and an annular shoulder (23), facing the one part, in the foot region of the threaded pin (19).
- 20 6. Parts to be connected with one another by means of a screw connection according to claim 5, characterised in that,  
in the stop position of the parts (17a, 17b) the  
25 annular shoulder (23) covers over the end opening of the hole widening (20).
7. Parts to be connected with one another by means of a screw connection according to any preceding claim, characterised in that,  
30 the hole widening (20) has a circular cross-sectional surface.
8. Parts to be connected with one another by means of a screw connection according to any preceding claim, characterised in that,  
35 the transversely directed offset (v) of the hole

SUB AG)

widening (20) corresponds to or is greater than the depth (t) of the thread grooves.

- 5 9. Parts to be connected with one another by means of a screw connection according to any preceding claim, characterised in that,

10 there is present at the transition between the hole widening (20) and the remaining section (L5) of the threaded bore (18) and/or at the free end of the threaded pin (19), in each case a surface (29, 31) converging in the screw-in direction, in particular a cone-shaped surface.
- 15 10. Parts to be connected with one another by means of a screw connection according to any of claims 3 to 9, characterised in that,

20 the radial dimension (t1) of the tapering (33) corresponds to or is greater than the depth (t) of the thread grooves.
- 25 11. Parts to be connected with one another by means of a screw connection according to any of claims 3 to 10, characterised in that,

30 at the free edge of the threaded bore (18) and/or at the transition between the tapering (33) and the remaining section (L7) of the threaded pin (19) there is provided a surface (24, 34) converging in the screw-in direction, in particular a cone-shaped surface.
- 35 12. Parts to be connected with one another by means of a screw connection according to any preceding claim, characterised in that,

the length (L4) of the threaded pin (19) is greater than the length (L2) of the hole widening (20), in particular is greater by the axial dimension of one or more thread grooves.

SUB A6

13. Parts to be connected with one another by means of a screw connection according to any of claims 3 to 12, characterised in that,
- 5 the length (L4) of the threaded pin (19) is greater than the length (L6) of the tapering (33), in particular is greater by the axial dimension of one or more thread grooves.
- 10 14. Parts (17a, 17b) to be connected with one another by means of a screw connection (17) of which one has a threaded bore (18) and the other has a threaded pin (19), characterised in that,
- 15 the threaded bore (18) is widened in its entry region (L2) by means of an insertion hole (25) into which the threaded pin (19) can be inserted.
15. Parts to be connected with one another by means of a screw connection according to claim 14, characterised in that,
- 20 the inner diameter of the insertion hole (25) is adapted, taking into account a slight play for movement, to the outer diameter of the threaded pin (19) or to a cylindrical section on the threaded pin (19).
- 25 16. Parts to be connected with one another by means of a screw connection according to claim 14 or 15, characterised in that,
- 30 at the transition between the insertion hole (25) and the remaining section (L5) of the threaded bore (18) and/or at the free end of the threaded pin (19) there is provided a surface (29, 31) convergent in the screw-in direction, in particular a cone-shaped surface.
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SUB A6)

17. Parts to be connected with one another by means of a screw connection according to any preceding claim, characterised in that, there is associated with the screw connection (17) a stop (22) in the base region of the threaded bore (18) or in the foot region of the threaded pin (19).

SUB A7)

18. Parts to be connected with one another by means of a screw connection according to any of claims 3 to 17, characterised in that, the radial dimension (t1) of the tapering (33) corresponds to or is greater than the depth (t) of the thread grooves.
19. Parts to be connected with one another by means of a screw connection according to any preceding claim, characterised in that, the stop (22) is formed by means of radial stop surfaces (23a, 23b) or by cone section surfaces (29, 31) convergent in the screw-in direction, on the parts (17a, 17b).
20. Parts to be connected with one another by means of a screw connection according to any preceding claim, characterised in that, the parts (17a, 17b) are parts of a medical, in particular dental-medical, instrument (1).
21. Parts to be connected with one another by means of a screw connection according to claim 20, characterised in that, the one part (17b) is a tool and the other part is a tool holder, in particular a handpiece (2), preferably an oscillation shaft (3) of a handpiece (2).